

BERKHANOV, D. G.; YEROKHINA, K. I.; LEMBERG, I. Kh.; UDRALOV, Yu. I.

"Investigations of Coulomb-Excitations of Nuclei of Odd-A with the Help of Ions of Nitrogen with Energies from 35 to 52 MeV."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

FTI (Physico Technical Inst)

ACCESSION NR: AP4024042

S/0048/84/028/002/0232/0236

AUTHOR: Alkhazov, D.G.; Gangrskiy, Yu.P.; Lemberg, I.Kh.; Udralov, Yu.I.

TITLE: Coulomb excitation of electric octupole transitions in even-even tin isotopes /Report, Fourteenth Annual Conference on Nuclear Spectroscopy held in Tbilisi 14 to 22 Feb 1964/

SOURCE: AN SSSR. Izvestiya. Seriy fizicheskaya, v.28, no.2, 1964, 232-236

TOPIC TAGS: Coulomb excitation, electric octupole transition, collective level, reduced transition probability, even-even tin isotope

ABSTRACT: It is known from experiments on inelastic scattering of protons, deuterons and  $\alpha$ -particles that in the case of medium atomic weight isotopes there are observed collective excited states with energies in the range from 2.5 to 4.0 MeV. The collective nature of these levels is evinced by the large value of the excitation cross section (comparable with the excitation cross section for the first levels). On the basis of the inelastic scattering data these levels have been assigned spin and parity  $3^-$  and in view of their nature are associated with octupole vibrations. Investigation of Coulomb excitation of the  $3^-$  levels is of considerable in-

Card 1/3

ACCESSION NR: AP4024042

terest inasmuch as it allows of determining not only the level energy but also the reduced transition probability  $B(E3, 0 \rightarrow 3)$ . In the present work there was investigated Coulomb octupole excitation in even-even tin isotopes. In such experiments, for reduction of the background radiation one must record either  $\gamma$ - $\gamma$  coincidences or coincidences between the  $\gamma$ -rays and the inelastically scattered bombarding ions; both methods were employed in the present study. To increase the yield of  $\gamma$ -rays associated with excitation of the  $3^-$  levels there were employed cyclotron accelerated  $N^{14}$  ions with energies close to the Coulomb barrier of the target nucleus; for the most part,  $N^{14}$  ions with energies of 44.5, 48.5, and 52.5 MeV. The targets were enriched in the even isotopes  $Sn^{114}$ ,  $Sn^{116}$ ,  $Sn^{118}$ ,  $Sn^{120}$ ,  $Sn^{122}$  and  $Sn^{124}$ . A number of the coincidence spectra are presented in figures and the values of  $B(E3)$  deduced from the measurements are tabulated and compared with the results of O.Hansen and O.Nathan (Nucl.Phys.42,197,1963). The mean value of  $B(E3)$  is close to  $0.20 e^2 10^{-72} cm^6$ , which is substantially lower than the values obtained by Hansen and Nathan (the higher values reported by these investigators are attributed to the influence of nuclear interaction processes). The values of  $B(E3)$  deduced from the results of  $\gamma$ - $N^{14}$  coincidence measurements decrease with decrease in ion energy. In general the results of the present investigation of octupole Coulomb excitation show that collective  $3^-$  states are systematically excited in even-even tin isotopes; this is in

Card 2/3

ACCESSION NR: AP4024042

striking contrast with the behavior of the first  $2^+$  levels, the energy of which decreases with increase of A. The values of the ratio of the experimental value of  $B(E3)$  to the single particle value of  $B(E3)$  vary in the range from 20 to 40, i.e., are considerably greater than the corresponding ratios for the first  $2^+$  levels in the even-even tin isotopes. Orig.art.has: 2 formulas, 7 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 28Sep63

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: PH

NR REF SCV: 003

OTHER: 010

Card 3/3

A L 11826-66 EWT(1)/EWA(h)

ACC NR: AP6001569-

SOURCE CODE: UR/0120/65/000/C06/0058/0064

AUTHOR: Vasil'yev, V. D.; Gal'perin, L. N.; Il'yasov, A. Z.; Lemberg, I. Kh.; Udralov, Yu. I.

ORG: Physicotechnical Institute, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Gamma spectrometer with a p-i-n semiconductor detector 25

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1965, 58-64

TOPIC TAGS: gamma spectrometer, semiconductor device, particle detector, multi-channel analyzer

ABSTRACT: The authors describe a gamma spectrometer with a p-i-n germanium detector cooled to the temperature of liquid nitrogen. The  $\gamma$ -spectrum is recorded by a 128-channel amplitude analyzer with an expander at the input. Line width of instrument noise is kept to 5 kev by a low-noise Chase preamplifier and carefully designed shielding. A block diagram of the unit is shown in Fig. 1. The detector is housed in the vacuum chamber of a Dewar flask and is kept at a temperature close to -190C by good thermal contact with the bottom of a vessel filled with liquid nitrogen. The signals to be studied are fed to the preamplifier and mixed at the input with reference pulses from the amplitude-controlled oscillator. The oscillator also generates code pulses in synchronization with the reference pulses which are fed through an hf cable to the input of the amplitude analyzer.

Card 1/3

UDC: 621.382:539.16.07

L 11826-86

ACC NR: AP6001569

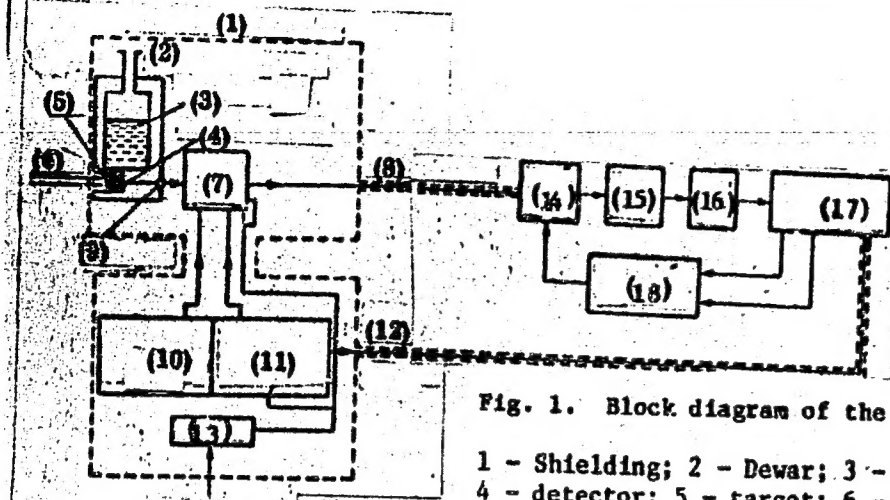


Fig. 1. Block diagram of the  $\gamma$ -spectrometer

1 - Shielding; 2 - Dewar; 3 - liquid nitrogen;  
4 - detector; 5 - target; 6 - beam; 7 - preampli-  
fier; 8 - signal; 9 - feedthrough insulator;  
10, 11 - amplitude stabilized oscillator; 12 - code  
pulse; 13 - power supply; 14 - 6A3P control tube;  
15 - UIS II amplifier; 16 - expander; 17 - 128-  
channel amplitude analyzer; 18 - amplification  
stabilization unit.

Card 2/3

L 11826-66

ACC NR: AP6001569

3

The code pulses separate the reference pulses from the detector signals after amplification. These same code pulses prevent registration of the reference pulses when the detector signals are being recorded. Pulses from a second amplitude-controlled oscillator may also be fed to the preamplifier input for simulating detector signals when checking the operation of the device. From the output of the preamplifier, the signals being studied and the reference pulses are fed to the third grid of a 6A3P tube, which controls amplification during stabilization. Amplification control voltage from the stabilization unit is fed to the first grid of this tube. The signals are then amplified by a UIS-II amplifier and fed through the expander to the amplitude analyzer. The various sections of the unit are described in detail, with diagrams of the cooling unit, low-noise preamplifier, expander, stabilization circuit, and output stage of the amplitude-controlled oscillator. Tests showed that continuous-duty stability of the analyzer is better than 0.15% with no apparent effects of interference from the cyclotron with which it is designed to be used. The authors thank S. M. Ryvkin, O. A. Matveyev, and N. B. Strokan for graciously supplying experimental detector models. Orig. art. has: 8 figures. [08]

SUB CODE: 40, 09 / SUBM DATE: 17Oct64 / ORIG REF: 003 / OTH REF: 001 / ATD PRESS: 4/77

HW  
Card 3/3

UDRAN, G.Ye.; YERMOLAYEVA, N.N.; REMIZOVA, A.M.

Methodology for setting the expenditure norms of material resources  
in the production of technical rubber products. Kauch. i rez. 24 no.5:  
40-43 My '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.



UDRAS, G.Ya.; YERMOLAYEVA, N.N.; REMIZOVA, A.M.

Determining the coefficient of area changes in textile materials  
in rubberizing and coating with rubber compounds on calenders.

Kauch. 1 rez. 24 no.9:46-48 '65.

(MIRA 18:10)

1. Nauchno-issledovatel'skiy institut resinovoy promyshlennosti.

UDREA, I.; MANTESCU, L.; HARAGA, C.

Characteristics of a reactor, necessary for its automation. Studii  
cerc fiz 12 no.3:595-604 '61.

1. Institutul de fizica atomica, Bucuresti.

(Nuclear reactors) (Automation)

IBELM, R.; TONIA, C.

"Contributions to the Study of Romanian Cotton from the 1953 Crop", p. 227,  
(INFORMATIA TEXTILA, Vol. 5, No. 9, September 1954, Bucharest, Rumania)

SC: Monthly List of East European Accessions (FELM), LC, Vol. 4, No. 4,  
March 1955, Uncl.

12-1-44

Rapid analysis of silica by Kjeldahl Ree chim  
(Bucharest) 6. 47 in silica material for the amount of SiO<sub>2</sub> must be at least 70%  
SiO<sub>2</sub>. Calculation of the SiO<sub>2</sub> content from wt. loss of the sample  
heated first in aqua regia and then in 40% HF often gives  
good results in a short time. Kjeldahl

124

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1. Lucrare efectuata in Spitalul unificat pentru studenti, Bucuresti.

MIRON, Radu, conf. univ.; NEGREI, Veronica; MANOLIU, Lucia; POLIZU, Lucia;  
VISA, Eugen; HAIVAS, M.; GLIGOR, I.; FUCHS, I.; ZOICAN, Voicu;  
BAGHINA, V., prof.; HADIRCA-BREAZA, I.; IVANESCU-TIRGOVISTE, C.;  
NEGREA, M.; SPIRIDON, I.; SZABO-PLOIESTI, T.; GRIGORE-PLOIESTI, I.,  
prof.; BAZACOV, Gh., prof.; PAUNESCU, Al.; MORARU, I.; SAHAGIA, C.;  
UDREA, V., prof. (Galati); NIMITAN, I. (Suceava)

Observations on the Analytic Geometry Manual for the 11th grade.  
Gaz mat fiz 15 no.6:298-321 Je '63.

1. Societatea de Stiinte Matematice si Fizice, Filiala Iasi (for Miron).
2. Societatea de Stiinte Matematice si Fizice, Filiala Craiova (for Negrei, Manoliu, Polizu).
3. Societatea de Stiinte Matematice si Fizice, Filiala Timisoara (for Visa, Haivas, Gligor, Fuchs).
4. Societatea de Stiinte Matematice si Fizice, Subfiliala Petroseni (for Zoican).
5. Societatea de Stiinte Matematice si Fizice, Filiala Ploiesti (for Baghina, Hadirca-Breaza, Ivanescu-Tirgoviste, Negrea, Spiridon, Szabo-Ploiesti, Grigore-Ploiesti).
6. Societatea de Stiinte Matematice si Fizice, Subfiliala Tg. Severin (for Bazacov, Paunescu, Moraru, Sahagia).

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New contributions to the geochemistry of beryllium. Studi cerc  
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1. Institute of Geology and Geography of the Rumanian Academy. 2.  
Corresponding Member of the Rumanian Academy (for Giusea).

GIUSCA, D.; IONESCU, Jeana; MURESU, Constanta

Contributions to the geochemical study of the Hignia Massif.  
Studii cerc geol geof geogr 9 no.2:431-438 '64.

1. Institute of Geology and Geography, Rumanian Academy.
  2. Corresponding Member of the Rumanian Academy (for Giusca).
- Submitted March 30, 1964.



NICOLAESCU, V.; BINIG, L.; LUNGUREAN, V.; UDRESCU, F.

Polarographic determination of germanium. Rev chimir Min petr  
13 no.7:431-432 J1 '62.

CHIRIAC, Elena; UDRESCU, Maria

A larva of Arrenurus (Hydrachnellae - Acari) parasitizing on the branchiae of Rhodeus sericeus amarus (Bloch). Comunicarile AR 12 no.5:565-570 My '62.

1. Comunicare prezentata de M.A.Ionescu, membru corespondent al Academiei R.P.R.

LAZAROIU, D.F., ing.; UDRESCU, Petre; VECAS, Alexandru; RADU, Emilia; CARACASIAN, E., ing.; BANDI, Fr.; TAIGAR, S., ing.

Present problems on establishing labor norms. Probleme econ 17 no.7: 151-156 J1 '64.

1. Direktor, "Electronica" Plant, Bucharest (for Lazaroiu).
2. Director, Iprofil Bucharest (for Udrescu).
3. Head of the Department of Labor Organization, Iprofil Bucharest (for Vecas).
4. Director, "Rascoala din 1907" Textile Enterprise, Bucharest (for Radu).
5. Chief Engineer, "Rascoala din 1907" Textile Enterprise, Bucharest (for Caracasian).
6. Director, "Bucuresti" Glass Factory (for Bandi).
7. Chairman of the State Committee for Labor and Wage Problems (for Taigar).

PAUNESCU, C.; GEORGESCU, M.; ILIESCU, I.; ZAHAREANU, F.; MAYO, B.; STANCIU, St.;  
IACRITIANU, V.; UDRISCU, St.; CIOARA, N.

Tonsillar disease and rheumatism in children; investigation in the  
vicinity of Grivita Rosie (1951-1955). Probl. reumat., Bucur. no.5:  
93-98 1958.

(RHEUMATISM, etiol. & pathogen.

relation to tonsillitis, in child., incidence in community  
near Bucharest)

(TONSILLITIS, complications

rheum. in child., incidence in community near Bucharest)

TETU, I.; DIMITRIU, A.V.; ALGEORGE, S.; CIOBA, M.; UDRUSCU, St.

Post-caustic esophagitis. Rumanian M. Rev. 3 no.1:66-68 Jan-Mar  
59.

(BURNS,  
caustic esophageal stenosis)  
(ESOPHAGUS, stenosis  
caustic)  
(CAUSTICS, inj. eff.  
esophageal stenosis)

UDRESCU, V.

"Riccati's equation", p. 545; "issued by the Rumanian Society of Mathematics and Physics, Monthly". (GAZETA MATEMATICA SI FIZICA, SERIA A., Vol. 12, Dec. 1954, Bucuresti, Rumania).

SO: Monthly List of East European Accession, (EAL), LC. Vol. 4, No. 5, May, 1955.

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An axiomatics of the relative homological algebra of discrete groups. Studii cer mat 12 no.2:437-447 '61.

UDRESCU, Valeriu St., profesor

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A generalization of the concept of continuous application.  
Comunicarile AR 13 no.6:499-503 Je '63.

1. Comunicare prezentata de academician Gr. C. Moisil.

UDRESCU, Valeriu St.

On some types of continuity. Comunicarile AR 13 no.6:505-507  
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1. Comunicare prezentata de academician Gr. C. Moisil.

UDRESCU, Valeriu St., prof. inv. mediu (Constanta)

Generalization of one of the D. Pompei arithmetical theorems.  
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'64.

UDRIN, N. R.

23519      OBLEPIKHA -- KHOROSHIY MEDONOS. PCHELOVOGSTVO, 1949, No. 7, c. 43

So: LETOPIS' NO. 31, 1949

UDRIS, E.

A valuable investigation of the development of Latvian local soviets.  
Vestis Latv ak no.12:181-182 '60. EEAT 10:9)

(Latvia--Politics and government)

UDRIS, E.; STRAUTMANIS, J.

"Legal status of interform organizations in the Latvian S.S.R."  
by [Latvijas PSR Zinatnu akademijas Ekonomikas instituta Tiesibu  
sektora zinatniskais līdzstradnieks] V.Sulcs. Reviewed by E.Udris,  
J.Strautmanis[in Latvian]. Vestis Latv ak no.1:151-152 '62.



UDRIS, G. A.: Master Biol Sci (diss) -- "The role of salts of the trace  
elements cobalt, manganese, zinc, copper, and iodine in the nutrition of cows".  
Riga, 1958. 20 pp (Latvian U in P. Stuchka), 150 copies (KL, No 7, 1959, 123)

UDRIS, G.A., kand.biolog.nauk

Ventilation of cowsheds. Veterinariia 36 no.10:51-53 0 '59.  
(MIRA 13:1)

1. Latvyskiy nauchno-issledovatel'skiy institut zhivotnovod-  
stva i veterinarii.  
(Dairy barns--Ventilation)

UDRIS, G.A., kand.biologicheskikh nauk (Riga)

Microelements prevent tuberculosis. Nauka i zhizn' 27 no.4:77-78  
Ap '60. (MIRA 14:5)  
(Tuberculosis in animals)

UDRIS, G.A., kand.biologicheskikh nauk

Microelements in the prophylaxis of cattle tuberculosis. Veterinar-  
iia 40 no.2:17-20 F '63. (MIRA 17:2)

1. Latviyskiy nauchno-issledovatel'skiy institut zhivotnovodstva i  
veterinarii.

S/169/62/000/005/014/093  
D228/D307

AUTHORS: Yeremin, V. K., Klenchin, N. N., Udris, K. P. and  
Stuchevskiy, N. I.

TITLE: Geologic surveying and geophysical operating procedure  
in conditions of enclosed regions

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1962, 23, ab-  
stract 5A179 (V sb. Geol., metodika i tekhn. razved-  
ki, labor. raboty, (5), Alma-Ata, 1961, 19-28)

TEXT: In conditions of enclosed regions geophysical research me-  
thods lead in the general complex of geologic operations and begin  
with regional investigations. Seismic, gravimetric, electric and  
magnetic prospecting, accompanied by drilling, are used in this  
stage. Complex areal investigations at a scale of 1:200,000 in  
sections, outlined by the regional survey, represent the next stage  
of depth mapping. The investigational complex includes: aeromagne-  
tic and aerelectric prospecting, gravimetric prospecting, electric  
prospecting by the БЗЗ (VEZ) and ДЗЗ (DEZ) methods, geologic sur-

Card 1/2

Geologic surveying and ...

S/169/62/000/005/014/093  
D228/D307

veying, drilling operations, and geochemical investigations. Complex geologico-geophysical searches, including the obligatory execution of gravimetric and magnetic prospecting operations, are made in perspective areas, subject to mapping on a scale of 1:50,000. The choice of other geophysical and geochemical methods, and also the volume of drilling operations, is governed by the concrete geologic conditions and by the problems of seeking useful minerals. [Abstracter's note: Complete translation.]

Card 2/2

Udriis, O. Yu.

PHASE I BOOK EXPLOITATION

SOV/6150

Akademiya nauk Latvyskoy SSR. Institut eksperimental'noy meditsiny.

Voprosy kurortologii. [t.] 5: Problemy fiziologicheskogo deystviya i terapevticheskogo primeneniya aeroionov (Problems in Health-Resort Therapy. v. 5: Studies of the Physiological Effect and Therapeutic Application of Air Ions). Riga, Izd-vo AN Latvyskoy SSR, 1959. 424 p. (Series: Its: Trudy, t. 20) Errata slip inserted. 1000 copies printed.

Sponsoring Agency: Akademiya nauk Latvyskoy SSR. Institut eksperimental'noy meditsiny.

Editorial Board: Resp. Ed.: L. L. Vasil'yev, Professor, P. D. Ferli, Professor, F. G. Portnov, Candidate of Medical Sciences, Ya. Yu. Reynet, Candidate of Physical and Mathematical Sciences, and L.M. Tutkevich, Candidate of Medical Sciences; Ed.: A. Vengranovich; Tech. Ed.: A. Zhukovskaya.

Card 1/7

Problems in Health-Resort (Cont.)

25  
SOV/6150

PURPOSE: This book is intended for physicians working at health resorts and for the general practitioner.

COVERAGE: This book, a collection of articles, is essentially the proceedings of the Second Conference on the Physiological Effect and Therapeutic Application of Air Ions, held at Riga (Latvian SSR) in December 1957. The use of negative air ions is believed to be beneficial in the treatment of nonhealing wounds and ulcers which often result from radiation injury. The book contains photos of numerous devices described in the text. Numerous references, mostly Soviet, are given at the end of some of the articles.

TABLE OF CONTENTS [Abridged]:

Gerke, P. Ya. Introduction

3

Vasil'yev, I. L. Current Problems of the Physiological and Therapeutic Effect of Air Ions

5

Card 2/7



Problems in Health-Resort (Cont.)

2  
SOV/6150

Gazhala, Ye. M. Influence of Lightweight Air Ions  
Upon the Heart Muscle of a Rabbit Under Normal  
Conditions and With Experimental Diphtherial Myo-  
carditis

187

Pislyegin, A. K. The Biological Significance of Air  
Ions and Some Peculiarities of Their Effect Upon  
the Organism

195

Liyepa, V. E. Influence of Various Doses of Air Ions  
Upon the Excitability of the Neuromuscular System

205

Siyre, E. K. Some Physiological Indices of the Ef-  
fect of Negatively and Positively Ionized Atmos-  
pheric Gas and Water Molecules

215

Zakke, I. P., O. Yu. Udris, I. F. Yaunkalns. Effect  
of Positive and Negative Air Ionization on the Cy-  
tology of the Blood and Connective Tissue of White  
Rats

221

Card 6/7

YAVORKOVSKIY, L.I.; UDRIS, O.Yu.

Syndrome of decreased resistance to infections and serum  $\gamma$ -globulins  
in patients with chronic leukemia. Probl. gemat. i perel. krovi 9 no.11:  
17-20 '64. (MIRA 18:4)

1. Kafedra terapii (zav. - dotsent E.Ya. Preymate) fakul'teta  
usovershenstvovaniya vrachey i kafedra fakul'tetskoy terapii  
(zav. - prof. K.K.Rudzitis) Rizhskogo meditsinskogo instituta.

LEVITSKIY, D.Z., gornyy inzh.; UDRIS, V.A., gornyy inzh.; KAROLENKO, D.T.,  
gornyy inzh.

Inclined conveyor gallery at the "Bol'shevik" Mine. Cor.zhur.  
no.1C:74-75 0 '64. (MIRA 18:1)

1. Trest Leninruda, Krivoy Rog.

UDRIS, Ya.Ya., Cand Techn Sci -- (diss) "Effect of  
mercury drops <sup>upon</sup> valve stability and the ~~regime of~~  
<sup>steam</sup> formation of the mercury valve." Mos, 1958,  
8 pp (All-Union Order of Lenin ~~E~~lectrical Engineering  
Inst im V.I. Lenin) 100 copies (KL, 29-58, 133)

- 74 -

UDK13.4a.4a.

24(3) p. 4.5

PHASE I BOOK EXPLOITATION

SOV/1341

Vsesoyuznyy elektrotekhnicheskiy institut

Issledovaniya v oblasti elektricheskogo razryada v gazakh (Research in the Field of Electric Discharge in Gases) Moscow, Gosenergo-izdat, 1958. 239 p. (Series: Its: Trudy, vyp. 63) 2,570 copies printed.

Ed. (Title page): Klyarfel'd, B.N., Professor; Ed. (Inside book): Antik, I.V.; Tech. Ed.: Borunov, N.I.; Editorial Board of Series: Andrianov, K.A., Biryukov, V.G. (Chief Ed.), Butkevich, Yu.V. (Deputy Chief Ed.), Granovskiy, V.L., Kalitvyanskiy, V.M., Klyarfel'd, B.N., Krapivin, V.K., Timofeyev, P.V., Fastovskiy, V.G., Tseyrov, Ye.M. and Shemayev, A.M.

PURPOSE: This collection of articles, issued by the Vsesoyuznyy Ordena Lenina Elektrotekhnicheskiy Institut imeni V.I. Lenina (All-Union Order of Lenin Electrical Engineering Institute imeni V.I. Lenin), is intended for scientists and specialists in gas discharge techniques.

Card 1/5

Research in the Field of Electric (Cont.)

SOV/1341

COVERAGE: This collection comprises research papers on problems of applied physics of electric discharge in gases. The papers cover the following subjects: formation of an electric discharge when high voltages are applied to the electrodes of gas-discharge tubes, the behavior and properties of the cathode spot forming on the mercury surface, methods of investigating gas density during passage of large currents through the discharge tubes and the density distribution of current on the plate surface of mercury rectifiers. The articles can be divided basically into three groups according to the following subjects: 1. Formation of initial states of self-discharge. This subject is discussed in the 1st and 2nd articles, in which discharge firing is investigated in uniform and nonuniform fields at low gas pressure and at high voltages, in the 3rd article on the spread of plasma beyond the limits of the discharge space, and in the 4th article on the transition of a negatively charged electrode from sonde to cathode conditions. 2. Formation of arc discharge on a metal surface, in particular, on a mercury surface. This subject is discussed in the 5th article on secondary breakdowns of

Card 2/5

Research in the Field of Electric (Cont.)

SOV/1341

various gases at atmospheric pressure, in the 6th article on the extinction and re-excitation of the cathode spot on the mercury surface, in the 7th, 8th and 9th papers on the properties and behavior of mercury droplets, and in the 12th article on current density distribution on the plate surface. 3. Development of methods of measuring the dynamics of gas density in the discharge space. This subject is covered in articles 10 and 11. Articles 1, 2, 5, 7, 8, 9, 10 and 11 represent parts of candidate dissertations of the respective authors. All papers were written under the supervision of Professor B.N. Klyarfel'd.

TABLE OF CONTENTS:

Introduction	5
Guseva, L.G. Discharge Firing in Molecular Gases When pd < (pd) <sub>min</sub>	7

Card 3/5

Research in the Field of Electric (Cont.)	SOV/1341	
Guseva, L.G. Discharge Firing in Nonuniform Fields at Low Gas Pressures		17
Krapivina, I.V. (Deceased) The Spread of Plasma Beyond the Limits of the Discharge Space		38
Aleshkov, B.M. Formation of Self-discharge on the Negative Electrode in Plasma		48
Rubchinskiy, A.V. Restoration of Disruptive Strength After Spark Discharge		54
Mantrov, V.M. Extinction of the Excitation Arc During Rapid Decrease of Discharge Current Through a Mercury Rectifier		88
<u>Udris, Ya.Ya.</u> Scattering of Droplets by the Cathode Spot of a Mercury Arc		107

Card 4/5



Research in the Field of Electric (Cont.)	SOV/1341
<u>Udris, Ya.Ya.</u> Rebound of Mercury Droplets on Hard Surfaces	129
<u>Udris, Ya.Ya.</u> Backfires Caused by Mercury Droplets	147
Rubchinskiy, A.V., F.S. Kobelev, and V.M. Mantrov. Method of Measuring of Mercury Vapor Density	170
Timofeyev, A.A. Dynamic Changes of Vapor Density in a High-voltage Mercury Rectifier	192
Neretina, N.A. Current Distribution on the Plate Surface of Mercury Rectifiers	218
Bibliography	240
AVAILABLE: Library of Congress	

JP/atr  
4-13-59

Card 5/5

9.3/50

69255

SOV/112-59-17-37046

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 17, p 182 (USSR)

AUTHOR: Udris, Ya.Ya.

TITLE: Spraying of Drops by the Cathode Spot of a Mercury Arc

PERIODICAL: Tr. Vses. elektrotekhn. in-ta, 1958, Nr 63, pp 107-118

ABSTRACT: Determined are the sizes, number, directions of departure and velocities of drops, sprayed by a freely running cathode spot of a mercury arc. It is found out that under certain conditions drops can form directly in the volume of the mercury-arc rectifier, as a result of condensation of mercury vapor. The fixation of the cathode spot reduces the diameter of the drops by an order of magnitude, still their number remains rather large.

From author's résumé.

Card 1/1

69256

R.3150

SOV/112-59-17-37047

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 17, p 182 (USSR)

AUTHOR: Udris, Ya.Ya.

TITLE: Reflection of Mercury Drops From Hard Surfaces

PERIODICAL: Tr. Vses. elektrotekhn. in-ta, 1958, Nr 63, pp 129-146

ABSTRACT: Reflection of drops sprayed by the cathode spot of a mercury arc<sup>21</sup> from cold and heated steel, graphite, and glass surfaces, was studied. Break-up of drops on steel and graphite surfaces within the temperature range of 18 - 800°C was observed. A comparison of experimental data on break-up of drops led to a conclusion on the existence of speed limits of sprays flying out from the cathode, and made it possible to determine the magnitude of these speeds, depending on the size of the drops.

From author's résumé.

Card 1/1

69257

SOV/112-59-17-37048

9,3150

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 17, p 182 (USSR)

AUTHOR: Udris, Ya.Ya.

TITLE: Arc-Back Caused by Mercury Drops

PERIODICAL: Tr. Vses. elektrotekhn. in-ta, 1958, Nr 63, pp 147-169

ABSTRACT: During a study of the conditions under which the arc-backs arise under the action of sprays from the mercury arc cathode and drops of mercury condensate, limiting parameters of drop arc-backs were established, i.e. minimum temperature and voltage below which the development of arc-backs is impossible. A comparison of steel and graphite electrodes has shown that the latter are considerably more stable in relation to drop arc-backs. It is established experimentally that an arc-back begins with ignition of a self-sustained discharge in an ionic layer near the negative electrode. Under favorable conditions this discharge transforms into an arc.

From author's résumé.

Card 1/1

AUTHOR: Udriş, Ya.Ya. (Engineer) SOV/110-59-1-5/28  
TITLE: Screening of the Anode System of a Mercury Valve (Ob  
ekranirovke anodnogo uzla rtutnogo ventilya)  
PERIODICAL: Vestnik Elektropromyshlennosti, 1959, Nr 1, pp 14-17 (USSR)

ABSTRACT: A free-moving cathode spot on a mercury valve causes intensive spraying of mercury from the cathode. With a cathode current of 6 A, about 1000 000 droplets per second are emitted from the cathode. If droplets reach negatively-charged electrodes they can cause back-fires and, therefore, most constructions of mercury valves include cathode screens to reflect the spray back to the cathodes. However, as some drops may pass the screen by multiple reflection and reach the anode, the filters and intermediate electrodes of the valves, besides their main function, also act as screens to prevent drops of mercury reaching the cathode. All screening imposes power losses and the best screening system is one that entirely prevents back-fires and yet gives the minimum loss. There is as yet no procedure for use in designing to determine whether mercury drops can cause back-firing in the valve. In recent years, a good deal of work has been done on the emission of mercury drops and their reflection from

Card 1/5

SOV/110-59-1-5/28

Screening of the Anode System of a Mercury Valve

various surfaces and also on the conditions of occurrence of back-fires when drops reach the negatively charged electrode. On the basis of these results a graphical method of verifying the absence of back-fires has been developed. By this method the design of screening systems has been improved. The procedure for verifying screening is based on the experimental fact that it suffices to stop only the larger drops. For these the back-fire threshold voltage is lower than the maximum negative voltage on the anode. Therefore, the first problem is to determine the diameter of the biggest drop that can reach the anode with a given arrangement of cathode screen, anode and intermediate electrode. The main numerical data necessary for the design are: the ratios of the maximum speeds and diameters of drops; the speed-loss factor when drops are reflected from steel and graphite; the relationship between the drop diameter and the minimum voltage at which the drops are able to cause back-fires. A formula is given to relate the maximum possible speed of a drop and its diameter; the corresponding curves are in Fig 1. The speed loss on reflection is greater from a cold than from a hot surface. The angle of reflection is always

Card 2/5

SOV/110-59-1-5/28

Screening of the Anode System of a Mercury Valve

greater than the angle of incidence, usually by 5 to 100. The data in Table 1 show that the velocity loss of drops reflected from a very hot graphite surface is somewhat higher than from steel. Graphite is a more satisfactory material than steel for use in cathode reflectors. Back-fires caused by drops can only occur if there is a sufficiently high threshold voltage on the electrode; this voltage depends on the material and condition of the electrode surface, the drop diameter, the ionic current density and the electrode temperature. Values of the threshold voltage for drops of different diameters are given in Table 2. The voltages were measured at an electrode temperature that was most favourable to the occurrence of back-fires with drops of the given diameter. The threshold voltage for graphite is at least twice as high as for steel. On reflection from hot surfaces, the drops are partially evaporated: the smaller the drops, the more the evaporation. Data are given about the magnitude of this effect. The effectiveness of the anode screening system is checked by a graphical method. For this purpose a set of nomograms is required, an example

Card 3/5

SOV/110-59-1-5/28

Screening of the Anode System of a Mercury Valve

of which is given in Fig 2. Each nomogram is a family of parabolic drop trajectories for drops leaving a given spot at a given initial speed but at different angles. In practice, it suffices to have nomograms ranging from 0.5 to 10 m/sec, for angles from 0 to 90° from the horizontal. The valve electrode system is drawn out on transparent paper and is applied in turn to the different nomograms. Trajectories are constructed for drops reaching the anode with the minimum numbers of reflections and velocities. It is then possible to determine from Fig 1 the maximum diameter of the drop that can still reach the anode, and from this the threshold voltage of back-fires. Gravitational retardation of drops subject to multiple reflection should also be allowed for. By way of example, the sectioned drawing in Fig 3 shows a series of trajectories of drops with various initial speeds in a pentode valve. The only drops that reach the anode are those with an initial velocity greater than 6 - 7 m/sec, that is with not more than 0.05 mm diameter. The corresponding threshold voltage for steel is about 10 kV and for graphite about 20 kV. As the working voltage of the

Card 4/5



SOV/110-59-1-5/28

Screening of the Anode System of a Mercury Valve

pentode is about 15 kV, it will operate practically without back-fires. When the anode spot is reliably fixed on metal wetted by mercury there is no need to screen the anode system, at any rate for relatively small voltages. This is because when the spot is fixed the

Card 5/5 drops of mercury thrown out are much smaller.

There are 3 figures, 2 tables and 2 Soviet references.

SUBMITTED: July 10, 1958

2042L  
S/109/60/005/012/022/035  
E192/E382

9.4/20 (1003, 1105, 1140)

AUTHOR: Udris, Ya.Ya.

TITLE: Mechanism of the Formation of a Cathode Spot on  
Negatively-charged Electrodes in a Gas-discharge  
Plasma

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol. 5,  
No. 12, pp. 2026 - 2032 + 1 plate

TEXT: The appearance of a cathode spot on negative electrodes in various gas-discharge devices leads to reduction of their electrical strength. A cathode spot on the anode of a mercury tube can be produced by a drop of mercury and this leads to the inverse breakdown of the tube during the negative half-cycle. In the present work the dynamics of the development of a cathode spot produced by a mercury drop is investigated. Two experimental methods were used: 1) the inverse ignition due to the drops was observed oscillographically; 2) the instant of the impact of the drops on the electrodes was photographed. Oscillographic observations were performed by means of cathode-ray oscillographs in which the tube had

Card 1/8

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20424

S/109/60/005/012/022/035

E192/E382

Mechanism of the Formation of a Cathode Spot on Negatively-charged Electrodes in a Gas-discharge Plasma

a long persistence screen. A special circuit at the input of the oscillograph was used to eliminate a large portion of the arc current peak so that the pre-arc stage of the inverse breakdown could be observed in detail. It was thus possible to observe simultaneously the strong and weak currents. The photographic investigation was based on the high-speed electron-optical transducer designed by M.M. Butslov. The transducer operated as a high-speed shutter and could be controlled by rectangular voltage pulses. The duration of the pulses, i.e., the exposure necessary in the experiments,

was of the order of  $10^{-4}$  sec. A falling drop was passing through a narrow beam of light above a horizontal electrode and produced a pulse in a photo-resistor circuit. This pulse was delayed and amplified and was used to open the shutter of the electron-optical transducer. The drop was illuminated from behind by means of a special device so that

Card 2/8

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S/109/60/005/012/022/035

E192/E382

**Mechanism of the Formation of a Cathode Spot on Negatively-charged Electrodes in a Gas-discharge Plasma**

the photograph could be taken against the light. The inverse breakdowns were caused by mercury drops having diameters of 1-2 mm which were falling onto a negative electrode provided with a heater. The electrode was situated in the plasma of an auxiliary DC discharge which could be controlled in such a way that the positive ion current flowing to the electrode could be varied. In certain cases, a mobile cathode spot of a mercury arc was used as the source of small drops. The current of the inverse breakdown was in the form of pulses which were obtained by discharging a condenser. This was charged by means of a half-wave rectifier. The methods of obtaining the drops for inverse breakdowns were described in detail in an earlier paper (Ref. 4). First, the inverse breakdowns due to drops were investigated at voltages between 300 and 500 V. Fig. 2a shows the oscillogram of the current due to inverse breakdown, which is typical for the above voltage range; the second oscillogram in Fig. 2 illustrates the inverse breakdown

Card 3/8

20424

S/109/60/005/012/022/035  
E192/E382

Mechanism of the Formation of a Cathode Spot on Negatively-charged Electrodes in a Gas-discharge Plasma

current produced on a steel electrode by a large mercury drop; the third oscillogram gives the current of two successive breakdowns produced by small mercury drops on a steel electrode. Further experimental results are as shown in a number of photographs which illustrate the development of the inverse breakdown and various stages of the reflection of the drop. By analysing a large number of such photographs and oscillograms at various voltages, it was concluded that there exist four distinct stages in the development of an inverse breakdown due to a drop. During the first stage a drop impinges on the surface of the negative electrode and is flattened. During the second stage, some of the drop becomes evaporated and a local increase in mercury vapour pressure is produced. This is accompanied by a bright emission of light from the flattened drop. During the next stage, the glow discharge undergoes a transition into an arc discharge. In the final stage an arc discharge is established where the drop plays

Card 4/8

20424  
S/109/60/005/012/022/035  
E192/E382

**Mechanism of the Formation of a Cathode Spot on Negatively-charged Electrodes in a Gas-discharge Plasma**

the part of a mercury cathode. The mechanism of the development of the inverse discharge in the above range of voltages can be explained by the field-emission transition of a glow discharge into an arc. In order to obtain data on the formation of inverse breakdowns at voltages between 10 and 12 kV, where the local increase in the mercury pressure is not necessary for the breakdown, special experiments were carried out in which the mercury drops were replaced by metal balls (of steel or lead) having diameters of 2 mm. These experiments showed that inverse breakdowns at the above voltages could be produced with a probability near to 100%; secondly, the voltages at which the spherical balls could produce inverse breakdowns were independent of the material of the electrodes or the material of the balls; thirdly, the photograph showed that the inverse breakdowns were produced when the gaps between the balls and the electrodes were of the order of 0.1 mm. Low-voltage (below 300 V) inverse discharges were also observed. These could be obtained under

Card 5/8

20424  
S/109/60/005/012/022/035  
E192/E382

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Mechanism of the Formation of a Cathode Spot on Negatively-charged Electrodes in a Gas-discharge Plasma

the following conditions: 1) in the presence of a dense plasma where the voltage and current of the positive ions were chosen in such a way that the drops having a diameter of 1-2 mm were producing inverse breakdowns with a probability of 10% on a steel electrode heated to 350 °C; 2) on the boundary between steel and quartz; it was found that on this boundary not more than 30 V with respect to plasma of an auxiliary discharge was required in order to produce a cathode spot. In general, low-voltage inverse breakdowns (below the minimum of the Paschen curve) could be obtained in the presence of high-density plasma and a hot electrode which produced a local increase in the mercury vapour pressure during the impact of a drop. The author expresses his gratitude to B.N. Klyarfel'd for his interest in this work and to V.F. Konakh for help in the experiments.

Card 6/8

20424

S/109/60/005/012/022/035  
E192/E382

Mechanism of the Formation of a Cathode Spot on Negatively-  
charged Electrodes in a Gas-discharge Plasma

There are 4 figures and 8 references: 4 Soviet and  
4 non-Soviet.

SUBMITTED: April 9, 1960

Card 7/8



20424  
S/109/60/005/012/022/035  
E192/E382

Mechanism of the Formation of a Cathode Spot on Negatively-charged Electrodes in a Gas-discharge Plasma

Fig. 2:

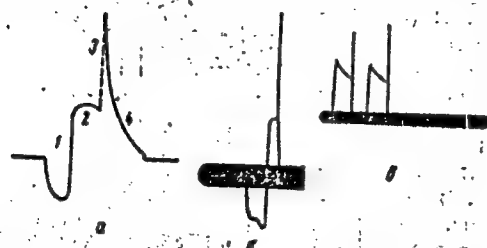


Рис. 2. Осциллограммы тока капельных обратных зажигания с выделением преддуговых стадий:

а — схематическое изображение; б — осциллограмма тока обратного зажигания, вызванного на стальном электроре крупная капля ртути:  $\Phi \approx 1$  мм,  $U = 470$  в,  $I = 350$  в,  $j_s = 1$  мА/см<sup>2</sup>; в — осциллограмма тока дуги последовательных обратных зажигания на стальном электроде под действием серии искр:  $\Phi$  не более нескольких десятых долей миллиметра,  $U = 2000$  в,  $I = 320$  в,  $j_s = 0,55$  мА/см<sup>2</sup>.

Card 8/8

L 10248-63 EWT(1)/EWG(k)/EWP(q)/EWT(m)/EEC(b)-2/ES(w)-2/BDS--  
AFTTC/ASD/ESD-3/SSD--Pz-4/Pab-4--JD/AT/HW-2/IJP(C)

ACCESSION NR: AP3001005 S/0109/63/008/006/1057/1065

AUTHOR: Udriş, Ya. Ya.

TITLE: Destruction of materials by the cathode spot of arc 92

SOURCE: Radiotekhnika i elektronika, v. 8, no. 6, 1963, 1057-1065

TOPIC TAGS: material destruction by arc, cathode spot

ABSTRACT: Experimental investigation of destruction of 18 materials (graphite, W, Ta, Mo, Ti, Co, Ni, steel, Cu, Au, Ag, Al, duraluminum, Zn, Bi, Cd, Pb, Sn) by a low-pressure-arc cathode spot. Speed of cathode spot travel was determined, as well as the rate and speed of field-dislodged particles; a field strength of approximately  $10 \text{ sup } 7 \text{ v/cm}$  was estimated. Over  $10 \text{ sup } 5$  particles per sec were spluttered by a cathode spot regime of a few tens of amperes. Particle speed was  $100\text{-}1000 \text{ cm/sec}$ , and their size, from 1 to many hundred microns. High-melt mechanically strong materials are least affected by the arc. "In conclusion, the author expresses his thanks to V. F. Konakh and N. T. Bogotoba for their assistance in experimental work." Orig. art. has: 4 figures, 5 formulas, and 1 table.

ASSOCIATION: none

Card 1/21

L 41005-66 EWT(1)/EWT(m)/T DS

ACC NR: AP6018746

SOURCE CODE: UR/0057/66/036/006/1140/1143

AUTHOR: Udria, Ya. Ya.; Guseva, L.G.; Chernov, V.A.

ORG: All-Union Electrotechnical Institute im. V.I.Lenin, Moscow (Vsesoyuznyy elektrotekhnicheskiy institut)

TITLE: On some properties of a high voltage hollow anode glow discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1968, 1140-1143

TOPIC TAGS: glow discharge, electric discharge, electrode, hollow anode, air, inert gas

ABSTRACT: The authors have investigated high voltage (3 to 25 kV) glow discharges in air and different inert gases at pressures from 0.001 to 0.1 mm Hg and currents from 0.0001 to 1 A between 6 to 35 cm diameter plane cathodes and plane or hollow anodes of the same diameter (the hollow anodes were from 15 to 100 cm deep). The current distribution on the plane end of a hollow anode was the same as on a plane anode, thus confirming the conclusion of G.W.McClure (Phys.Rev., 124, 696, 1961) that the glass tube confining the discharge in the case of plane electrodes becomes charged to approximately the anode potential and so gives rise to conditions approximating those within a hollow anode. The discharge current was found to be focused onto the central portion of the plane end of the hollow anode. The current to the cathode surface, on the other hand, was not concentrated in the central region of the electrode, the

Card 1/2

UDC: 537.525

L 41005-66

ACC NR: AP6018746

current density was actually somewhat lower in the center of the cathode than at some distance from the center. The focusing of the current on the anode and its defocusing on the cathode were enhanced by a longitudinal magnetic field. The enhancement of the current focusing due to the field of a short solenoid depended strongly on the axial position of the solenoid. Particles were withdrawn from the discharge region through holes in the electrodes. Difficulty was experienced with discharges through the openings in the electrodes when the pressure in the regions beyond the electrodes was the same as in the interelectrode region, but such discharges could be avoided by maintaining a low pressure in the regions beyond the electrodes. From measurements of the particles withdrawn from the discharge region through holes in the electrodes it was concluded, in agreement with the findings of McClure (loc.cit.) and D.Kamke and F.W.Richter (Ann. d. Phys., 10, 360, 1963), that 75-80% of the energy of the hollow anode discharge is carried by the electron current to the anode. The authors thank V.L.Granovskiy (deceased) and B.N.Klyarfel'd for valuable advice and discussions. Orig. art. has: 3 figures.

SUB CODE: 20,09/ SUBM DATE: 22Oct65/ ORIG.REF: 003/ OTH REF: 002

Card 2/2 *do*

L 33711-66

ACC NR: AP6025169

SOURCE CCDE: RU/0012/65/061/004/0623/0629

AUTHOR: Vasilescu, M. (Doctor, Lieutenant colonel); Idriachi, G. (Doctor; Lieutenant colonel); Dumitrescu, L. (Major; Doctor)

ORG: none

TITLE: Clinical, etiopathogenic, and therapeutical considerations on alopecia  
SOURCE: Revista sanitara militara, v. 61, no. 4, 1965, 623-629  
TOPIC TAGS: clinical medicine, disease therapeutics, skin disease, psychology, nervous system, tissue disease

ABSTRACT: On the basis of the cases treated by them, the authors discuss problems associated with alopecia. They point out that treatment must vary from case to case and that prognosis is usually uncertain. Of the cases treated by the authors, 52 percent were associated with neurovegetative disequilibrium with sympaticotonic predominance and psychic instability. [SPRS: 33,500]

SUB CODE: 06/ SUBM DATE: 26Dec64/ ORIG REF: 004/ OTH REF: 004

Cord 1/1

PP

0016

0518

U.S. JPM, C.; GHEMICH A.

The symbol  $\infty$  is not to be confused with the infinity symbol  $\infty$ .  
no.85305-210

NICULESCU, G.G. (Roman); COSTACHESCU, C.V.; SACTER, O.; BATINETU, D.M.  
(Bucuresti); CHISALITA, Adrian (Cluj); PIRSAN, Liviu (Bucuresti);  
GRIGORESCU, Serban I. (Bucuresti); BRATULESCU, I., prof.  
(Constanta); UDRISTE, Constantin, prof. (Bucuresti); CALUGARITA,  
Gh. (Bucuresti); VOICULESCU, Dan (Bucuresti); TEODORESCU, I.  
(Galati); IONESCU-TIU, C.; POPA, Eugen I. (Iasi); POPA, H.  
Alexandru (Pucioasa); STAVRE, Petre (Craiova); MUSTA, St. (Oradea)

Proposed problems. Gaz mat B 15 no.7:311-316 J1 '64.

HERLING, C. (Bucuresti); HURISTE, Constantin; PREDESCU, Stefan (Slatina);  
Pirsa, Liviu (Bucuresti); BERDAN, C.; IONESCU-TIU, C.; IONESCU,  
Florica H. (Bucuresti); FILIPCIU, Al. (Buzau); GEORGESCU, George  
(Bucuresti); SANDULACHE, C., prof. (Negresti, Iasi); MORTUN, F.;  
SCHEFFEL, Gabriela (Cimpulung); TEODORESCU, I. prof. (Galati);  
SIGLOVAN, I. (Petrosani); ACU, Dumitru (Cluj); GRECU, Estimle  
(Bucuresti); PAUN, N., prof. (Rimnicu Vilcea); GHEORGHIU, Adrian  
(Bucuresti); DUMITREASA, P., prof. (Cluj); GEORGESCU, Corneliu  
(Oradea); BOBANCI, V. (Bucuresti); BANESCU, Grigore, prof.  
(Cimpina); CPREA, Gr. (Filiasi); POPESCU, Ioan M. (Bucuresti);  
Serb, Ion (Iugo)

Proposed problems. Gaz mat B 16 no.4:172-177 Ap '65.



UDRIT, O.O.

Treatment of tuberculous mesoadenitis and peritonitis. Sbor. trud.  
Uz. nauch-issl. tub. inst. 3:87-90 '57. (MIRA 14:5)  
(ABDOMEN—TUBERCULOSIS)

UDRITS, Vil'gel'm. Fomich; KHILOV, K.L.; LOZANOV, N.M.; SUPRUNOV, V.K.;  
ORLOV, R.S., red.; RULEBA, M.S., tekhn. red.

[Diseases of the ear, throat, and nose; concise manual for  
physicians] Bolezni ukha, nosa i gorla; kratkoe rukovodstvo  
dlia vrachei. Leningrad, Gos. izd-vo med. lit-ry Medgiz,  
Leningr. otd-nie, 1960. 559 p. (MIRA 14:9)  
(OTOLARYNGOLOGY)

DOBRESCU, D., Dr.; UDROIU, A., dr.; GORCEA, V., dr.; GHEORGHIU, M., dr.;  
CIOCIRLIE, I., dr.

Allergic spontaneous pneumothorax. Med. int., Bucur. 3 no.7:  
1083-1086 Nov 56.

1. Lucrare efectuata in Spitalul militar -- Timisoara.  
(PNEUMOTHORAX, case reports  
allergic pneumothorax)  
(ALLERGY, complications  
pneumothorax, case reports)

UDROIU, Al., Col, Dr, MOLDOVAN, I., Maj, Dr, POPESCU, Val.,  
Lt-Col, Dr, RATIU, St., Maj, Dr, and GORSCOVAZ, V., Maj, Dr  
[affiliation not given]

"Considerations on the Diagnosis and the Necessity of Surgical  
Intervention in the Case of Foreign Objects in the Digestive  
Tube."

Bucharest, Revista Sanitara Militara, Vol 59, No 3, May-Jun 63,  
pp 461-465.

Abstract: Contains a brief review of the literature on the sub-  
ject and illustrates the techniques of diagnosis and surgery  
used at the Military Hospital of Timisoara by describing 10 cli-  
nical cases involving the swallowing of foreign objects with  
subsequent penetration into the sub-diaphragmatic part of the  
digestive tract.

Includes 12 figures, and 7 Rumanian references.

1/1

L 64570-65

ACCESSION NR: AP:023480

RU/0012/64/000/006/1003/1008

AUTHOR: Iobrescu, D. (Colonel, Doctor); Udriu, Al. (Colonel, Doctor); Moldovan, L. (Lieutenant Colonel, Doctor)

TITLE: Pathogenic aspects of some inflammatory tumors of the digestive tract

SOURCE: Revista sanitara militara, no. 6, 1964, 1003-1008

TOPIC TAGS: digestive system disease, neoplasm, gastroenterology, digestive system

ABSTRACT: The pseudotumorous aspects of bacillary lesions or of uncharacteristic stomach and intestine inflammations pose difficult diagnosis problems. The difficulties stem mostly from the modifications in the reactivity of the body and in that of microbial agents brought about by antibiotics, which blur the clinical and radiological differences between cancer, tuberculosis, and granule-like inflammations. There is a logical tendency of attributing these morbid aspects to cancer.

Card 1/2

L 64570-65

ACCESSION NR: AP5023480

Exploratory laparotomy is a necessary approach in many cases and helps establish an early diagnosis. The risks involved in laparotomy are negligible under the conditions of modern surgery. Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: LS

NR REF SOV: 000

OTHER: 009

JPRS

7/10/66  
Card 2/2

PAUNESCU-PODEANU, A., Prof.; UDROIU, V., dr.; CORCANU, G., dr.; MICLEA, F., dr.

Pathological correlations between the sella turcica and the  
pituitary gland. Med. intern., Bucur. 11 no. 12: 1819-1824 '59.

(SELLA TURCICA, pathology)

(PITUITARY GLAND, pathology)

PURNAL, M.Ya.; TRAKOVSKIS, G.A.

Increasing the yield of chlortetracycline by means of the modification of the composition of the nutrient medium. Perm. i spirt. prom. 31 no.6:33-34 '65. (MIRA 18:9)

1. Livanskiy zavod kormovykh antibiotikov.



PURMAL, M.Ya. [Purmals, M.]; UDROVSKIS, G.A.

Irradiation of *A.sureofaciens* spores with ultraviolet rays. *Ferm.*  
*I spirt.prom.* 31 no.3:38-39 '65. (MIRA 18:5)

1. Livanskiy zavod konromykh antibiotikov.

10

Present state of research on the production of higher hydrocarbons from methane. Aleksander Ushitsky. *Practical Chem.* 1, 300-3 (1937). Thermal conversion to C<sub>2</sub>H<sub>6</sub> is discussed. Bruno C. Metzner

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820005-5

Udryaki A.

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820005-5"

UDRYCKI, A.

Hutnik o/owiu (The lead foundry worker), by A. Udrycki. Reported in New Books, (Nowe Ksiazki), No. 4, March 1, 1956.

CIOFLICA, G.; LAZAR, C.; UDUBASA, Gh.

Some structural peculiarities in the vein system of the metalliferous  
Stanija Mountains. Studii cerc geol 7 no.2:329-353 '62.

UDUBASA, G., geolog (Bucuresti)

"Metamorphism" by N.A. Eliseev [Yelisseyev, N.A.]. Reviewed by  
G. Udubasa. Natura Geografie 15 no.2:89-90 Mr-Apr '63.

GEORGESCU, I.; PIRVULESCU, Cl.; MISCA, G.; UDUDEC, I.; GRUMAZ, L.

Treatment of recurrent dislocation of the shoulder joint by  
reinsertion of the capsule of the glenoid. Rumanian med. rev.  
no.8:73-76 '62.

(SHOULDER DISLOCATION)

POLAND/Physical Chemistry - Surface Phenomena. Adsorption.  
Chromatography. Ion Exchange.

B

Abs Jour : Ref Zhur Khimiya, No 19, 1959, 67387

Author : Sathyanarayana, S., Udupa, H.V.K.

Inst : Polish Academy of Sciences.

Title : Investigation of the Electrode Potential for Anode  
Oxidation of Glucose.

Orig Pub : Bull. Acad. polon. sci. Ser. sci. chim., Geol. et Geogr.,  
1958, 6, No 8, 493-497 XLII

Abstract : The anode potentials (AP) in the electrical oxidation of  
aqueous solutions of glucose (I) (20%) containing NaBr  
(2%) were studied on two types of graphite electrodes:  
1) rotating, 2) at rest in a mechanically agitated solu-  
tion, and 3) at rest in an unagitated solution; the  
method of polarization curves was used for this study

Card 1/2



POLAND/Physical Chemistry - Surface Phenomena. Adsorption.  
Chromatography. Ion Exchange.

B

Abs Jour : Ref Zhur Khimiya, No 19, 1959, 67387

in the  $i$  range 0.44-19.8 amp/dm<sup>2</sup> at 29-300. For electrode 1 the AP were constant in time and reproducible, while for electrodes 2 and 3, the AP were unstable and slightly reproducible. For identical  $i$ 's, AP's for electrodes 1 were below the AP's for electrodes 2, and the latter were below the AP's for electrodes 3. In NaBr solutions containing I or not, AP's differ slightly at the same  $i$ . It is assumed that the anode oxidation of I is a secondary reaction, while the discharge of Br<sup>-</sup> ions is a primary reaction. The current-based yields of gluconic acid (in the form of Ca gluconate) for anodes 1 and 2 are nearly the same at high volume  $i$ 's, and are significantly different at high volume  $i$ 's. (RzhKhim, 1955, No 16, 35003). -- N. Khomutov

Card 2/2

- 33 -

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Dual cathode technique for the electrolytic reduction of ~~m~~ -dinitrobenzene to 2,4-diaminophenol. Bul chim PAN 9 no.6:419-424 '61.

1. Central Electrochemical Research Institute, Karaikudi-3, India.  
Presented by T. Urbanski.

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TITOV, B.M., dotsent; VORONCHIKHIN, V.M., inzh.; TIMOFEEV, V.A., inzh.;  
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